

Developing Early Childhood Policy in Albania based on Scientific and Empiric Knowledge

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Abstract

The main aim of this research paper is to analyze some of the major principles of brain development during the first years of life so as to demonstrate the importance of these years from the neurobiological perspective but as well to put emphasis on the environment in which this development take place. This article will analyze empirical findings in the field of program evaluation studies especially intervention and preventive programs during infancy and early childhood.

Empirical findings reveal these programs are successful particularly when implemented during the first years of life. The discussion focuses on daycares in Albania, institutions which provide services for children of 6 months old until 3 years old. It has been observed that Albanian daycares are not perceived as educational institutions because the concept of education is closely related with kindergartens and schools. This study argues for the need to develop early childhood policy directly related with infancy and toddlerhood which are based on scientific and empirical knowledge so as to create high-quality learning and caring environments for children in their first years of life.

Key terms: Early Childhood Policy, Neurobiology, Programs, Daycares, Albanian Context

Introduction

Early experiences may determine the way genes are activated, or in some cases even if they are activated or not (Meaney, 2010). The physiological activity which is formed from experience is very powerful in changing chemical reactions which code the way genes are expressed in the brain cells (Levitt, 2003). The brain adapts to the environmental experiences. The physiological activity which is shaped by the positive learning experiences can lead to changes in the way genes are expressed, and these changes might be basic in the process of learning (Miller, C. A., Campbell, S. L., & Sweatt, J. D. , 2008). On the other hand, exposure to high level of stress in the first years of life can lead to long-term changes in the way our body will react to other stressful events in our life (Shonkoff, J. P., Boyce, W. T., & McEwen, B. S., 2009). The knowledge taken from neuroscience transmit an

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important conclusion related to the long-term biological traces that early experiences can have on human beings. The complex interaction of genes and the early experiences may boost positive adaptation or negative long-term health and mental outcomes. One of the main influences which are related with early environments is building warm and consistent relationships with caregivers. The caring relationships with parents, familiars, caregivers create the foundations of basic biological processes that regulate emotion, sleep, attention and the psych-social function of the human being (Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R., 2007). In the long-term, the constant and warm caring relationships are related with better mental and physical health, less behavioral problems, higher academic results, higher productivity at work, lower criminal activities (Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C. R., & Nores, M. , 2005).

In addition, from the empirical data we can come to the conclusion that early interventions are successful in improving the life of young children. In conclusion, there is a need to develop early childhood policy so as to help young children to meet their early developmental needs especially in daycares. The professional development of the daycares' staff, the quality of care and the implementation of the curriculum for infants and toddlers need to be a priority in early childhood. However, the development of early childhood policy can foster support systems for parents and families as well. One of the aims of these policies might be related with offering education parenting programs, parenting training and parenting consultations.

All the aspects of human capital, from the working skills and the legal, collaborative behavior, are built over capacities that develop from birth and during childhood (National Scientific Council on the Developing Child, 2007).

Basic principal of brain development

In order to understand importance of the first years of life, we need to comprehend some of the fundamental principles of brain development.

- a) The brain develops through a continuous process that begins before birth and continues even in adulthood. The brain is built over some critical periods that are associated with the formation of specific neural circuits which are responsible for specific skills. The development of complex neural circuits which are related with complex skills, happens when the development of less complex neural circuits and skills appear earlier. The formation of solid neural circuits in the early years increases the chances of positive results in the years to come and the formation of weak neural circuits increases the chances of mal-adaptation in the years to (Dawson G. & Fischer K., 1994).
- b) Through the interaction between genes and experiences brain develops. Brain consists of integrated neural circuits that are built over the continuous influence of genes and environment. Genes determine when specific neural circuits of brain will develop and experience helps in shaping these circuits. This process is nurtured by an innate motive of the child to acquire new skills. Young children spontaneously search for interaction when they babble, or when they want to communicate with words or when they cry, they are waiting for adults to respond their signals. The warm, consistent, reciprocal interaction boosts the formation of the adaptive neural circuits (National Scientific Council on the Developing Child,

2007). The most important relationships are formed in the family. However, most of the time these relationships are extended and daycares' caregivers might play an important role as well (Shonkoff, J. & Meisels, S., 2000).

- c) The brain develops by forming first simple neural circuits and then more complex circuits. When a neural circuit is built and is functioning, this neural circuit counts for the building of other more complex neural circuits. The formation of complex neural circuits may slow down or even inhibited if lower level neural circuits are not shaped completely. The acquisition of complex skills occurs when basic skills are acquired. Circuits are built over circuits and skills generate skills. (Knudsen, 2004).
- d) Cognitive, socio-emotional skills are intertwined. Brain is multi-functioning organ which operates in a highly coordinated manner. All human skills are developed through an ongoing and intertwined process. Emotional well-being, social and cognitive skills are closely related and altogether these skills make the foundation of human (McCarteny K. & Phillips D., 2006).
- e) Stress in extreme levels or toxic stress in early childhood is associated with extreme consequences in nervous system, hormonal system, the development of neural circuits which can make learning a difficult activity, as well as consequences in behaviors, physical and mental problems throughout the course of life. Activating the stress control system produces a series of physiological reactions. These reactions organize our body to face threats which are vital for our survival. Healthy development depends on how these systems face rapidly with the stressful situation so as to return to their primary functions. However, when these physiological reactions are activated in high level for a long time, these reactions might have very negative consequences in the development of the brain. So toxic stress can weaken the foundation on which future behaviors, learning and health are built (Caldji C. Tannenbaum B. Sharma S. Francis D. Plotsky P. & Meaney M., 1998).

These basic principles of brain development increase our knowledge of early development. The chances for a healthy society are higher when the appropriate environments are provided for the caring of young children. Prevention is more efficient than treatment of problems in the later years. The brain is specialized more and more by undertaking more complex function and becomes less able to reorganize and adapt to unpredictable challenges. When neural circuits are shaped, with the time they consolidate and it becomes very difficult to change these neural circuits.

Brain plasticity, the ability of brain to change the function of its circuits, reaches its peak during childhood, especially the first three years of life, and then this ability weakens in the later years by making it difficult to change mal-adaptive behaviors and the acquisition of new skills needs much more time and costs (Hensch, 2005).

Results taken from programs in early childhood

There have been taken several programs during pregnancy, the first years of life and later years. However many programs have not been successful in changing developmental trajectories due to weaknesses in planning and implementing these programs. Nevertheless, some other programs which have been rigorous toward the scientific criteria and have been designed as experiments have been successful. One of these programs is called Abecedarian. This program aimed at creating high quality environments for children since

birth to the age of school. Children that were included in the program came from low socio-economic families, whose parents' education level was low and nearly 98% of them were afro-Americans. The program created age-appropriate environments for children and activities that enhanced these children development. Children attended the program 5 days a week for 8 hours. The program started in 1972 and ended in 1977. Then, in the later years, children in the control and experimental groups were observed so as to analyze their developmental trajectories. From the study, it came out that children who attended the program showed higher cognitive and socio-emotional development compared with children who did not attended the program. Furthermore, in the later years it came out that children who attended the program did better at school, had higher chances to attend school and were not referred for special education (Aos S. Lieb R. Mayfield J. Miller M. & Pennucci A. , 2004).

Another successful program is Perry Preschool Project. This program provided high quality care for infant and toddlers that lived in poor conditions but as well it provided weekly home-based visits to develop parenting skills for parents and to make it possible that the activities held in program could be applied even at home. This program started in 1960 and since then there have been measured the effects of this program in the participants. Once again, children that were part of the control group showed high academic achievements in school, reduction in the special education schools, higher rates of finishing high school, reduction of pregnancy during adolescence, higher rates of employment, higher incomes and lower involvement in criminal activities (Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C. R., & Nores, M., 2005).

The Early Head Start program aims at high quality care for children and providing services for parents and families as well in and out of home. Parents' socio-economic status was low. The services for families and parents included the development of parenting skills, parent's goal orientations, and giving information to parents about their children's health and development. Parents have been selected before the birth of the children and participated until their children were 3-year-olds. The best outcomes were observed in those groups which received all the services. Children's socio-emotional and cognitive development was higher in these groups than the other groups who did not receive all the services. On the other hand, parents showed increased parenting skills and economical autonomy (Administration for Children and Families, 2002).

Incredible Years Program has had a great impact especially in children of age 2 to 8 years who showed aggressive behaviors. Professional support has been given to parents, caregivers to control aggressive behavior in children. From the results, researchers have come to the conclusion that aggressive behavior significantly decreases in young children during this program (Webster-Stratton, C., Reid, J., & Hammond, M., 2001).

However, when some programs have been implemented in a larger scale, with many experimental groups, the outcomes did not demonstrate important impact in parents' and children's behaviors. One very important explanation for these outcomes can be explained by giving low quality services (St. Pierre, R.G., & Layzer, J.I., 1999). Therefore, some very important conclusions have been attained by these studies. For a program to have positive outcomes, the quality of service need to be high, caregivers need to be professional, the environments need to be with high adult-to-child-ratio, curriculum which is age-appropriate, a rich language environment, warm relationships and responsible caregivers (Center on the Developing Child at Harvard University, 2007). Services in early childhood

need to be very high in quality especially for children who are more at risk but even for parents so as to create home environments that enhance the quality of experience in children. Daycares' centers need to follow these principles in order to provide the adequate environment for young children.

Daycares in Albanian context

There have been taken 26 semi-structured interviews with caregivers in daycares chosen from 5 daycares in Tirana from 29 daycares which actually are functioning. The caregivers have been selected randomly. From 26 caregivers, 11% had a bachelor degree in education, 11% were studying to take a bachelor degree on education, 30% had a bachelor in nursing, 7% had a professional high school for doctor assistant, 11% had a specialization as social animator and only 30% had only a high school diploma. The majority of caregivers had a professional orientation toward education and physical health. The selected daycares were representative of the 29 daycares in Tirana. The interviews were held in the psychologist room. The main aim of the interviews was to measure the attitudes of work conditions of caregivers, the services that daycares offer to children during the week days. The interviews were audio recorded.

Results and Discussions

The interviews shaped a framework on the psychological services in daycare centers, the working conditions of caregivers and the implementation of the curriculum in daycare centers.

Psychological service is provided in the 29 daycare centers in Tirana. However, this service is limited due to the low number of psychologists working in daycare centers which is nearly one psychologist is responsible for 4 to 5 daycare centers. Psychological services in daycares include training of caregivers, consultations with caregivers and parents, psychological evaluation, even therapy if psychologists do have the expertise. Thus providing psychological services in daycares can be challenging.

On the other hand, the working conditions of caregivers can become real barriers in guaranteeing the age-appropriate service for children in daycare. The most important factors that negatively influenced the work of caregivers were the adult-child-ratio, the large groups of children, the low salary and the status of caregivers which did not encouraged professional development.

In the youngest group of children (6 months to 12 months) the ratio between caregivers and infants in most cases is 1:7, but there have been even cases when this ratio has escalated to 1:8. On the other hand the optimal ratio is 1:3 or 1:4. In another group, which is called the mix group (12 months to 36 months) the ratio is 1:8 or one 1:9. There are even cases when this ratio goes 1:10. In the oldest group (24 months to 36 months or even 42 months) the ratio is nearly 1:9 but even 1:10. In this group the ideal ratio is nearly 1:5. In the youngest groups these challenges were even harder to face because the very important needs of infants to have physical contacts with the caregivers and being more depend on them. Another difficult factor to be handled was the large size groups. It is recommended that infant groups should have 8 infants. In daycares usually the infant size group was 14 to 16. In the group of children aged 1 to 2 the size group should not be larger than 10, however in daycares the groups are 18 in some cases even 20. In the older group of children aged 2 to 3, or even 3 and half the maximum number of groups is 12 but in Tirana daycares the group size of toddlers at this age is 20-28. Respecting the size

number of groups is fundamental for children. Optimal size numbers in group, increases the chances of the child to interact with the caregiver, with other children in a way that a warm, consistent and secure relationship is formed. As well caregivers supervise every child behavior more closely and can instruct children by using positive discipline to control their behaviors.

Furthermore, caregivers have a lower status than educators in kindergarten and teachers. This lower status is reflected by the lower salary caregivers have. Even though 70% of caregivers express a high interest for professional development, their salary remains the same. Even though the caregiver status states that caregivers need to be responsible for caring physically for the child, caregivers in their daily routines with children do more than caring physically for children. In fact, the responsibilities of caregivers are directly related even with respecting the need to explore in children and learning in the daycare environments by have the age-appropriate support given by the caregivers. Caregivers have the same function of a teacher because they educate young children during the long hours they spend with them.

The word teacher is always intended to refer to any adult responsible for the direct care and education of a group of children in any early childhood setting. Included are not only classroom teachers but also infant/toddler caregivers, family child care providers, and specialists in other disciplines who fulfill the role of teacher (Coppole, C & Bredekamp, S, 2009).

Yet, caregivers implement the daily curriculum with children. Usually the daily program lasts for 10 to 20 minutes. In these minutes caregivers organize games with children in a way that enhances socio-emotional, cognitive and physical development. Caregivers may choose between activities that have higher interest for children and then write their comments on the way children reacted in these activities. Implementing infant-toddler curriculum in daycares is essential to promote children development. However, implementing an age-appropriate curriculum in daycares needs first better working condition for caregivers and creating opportunities for professional development. Still, there are some positive effects that are related with the play activities held during the day based on the curriculum. Two important aspects are related with creating a rich language environment for children and supporting children in acquiring developmental milestones through the play activities. However, it was observed that caregivers' interaction with children were structured and directive during the play activities. This is due to the large size groups. While children learn in a holistic way and their attention change rapidly. This is one of the reasons why some children do not show high interest in organized games. There is a vital need to create environments when learning happens in a non directive way. Plus, the play materials were limited because mostly these play materials were provided by parents. The collaboration with parents is another aspect of curriculum which is important because parents and caregivers communication can help both of them understand the child behaviors at daycare and at home. However, according to the caregivers, parents are more interested to listen information that is related with health, food and not information related with how the child has interacted with other peers, has expressed his emotions or if he has learned new words in the daycare.

The implementation of age-appropriate curriculum in daycares is a basic step in constructing quality environments that enhance optimal development in young children. Also the working conditions of caregivers in daycares which inhibit the implementation of age-appropriate curriculum need to be improved.

Early childhood policy development in Albania

According to the scientific and empirical knowledge and as well, early childhood policy needs to be developed in two main aspects: 1) How age-appropriate services systems should be built in daycares and 2) Parenting services systems. Childhood policies need to be extended especially in how services in daycare centers need to be built in order to meet every child need. Priority should be given to early learning, implementation of curriculum, and the professional development of the staff. Infant/toddler teachers are qualified in the socio-emotional, cognitive and physical development of young children. Services in daycares should be oriented toward helping children reach their optimal development by guaranteeing high quality of care. However a special attention should be given to children who come from low socio-economic families and even a more specialized attention should be given to children who experience toxic stress.

On the other hand, policies regarding parenting and family services should take an important role especially when knowledge from neuroscience makes us understand the vital role of early environment has on human beings. Family services should be provided as early as possible for young children. As well, programs focused on home experiences of children should be shaped based on such policies. From empirical findings the results are positive regarding the home-based programs implemented by experts of the child developmental field. These programs are necessary especially for parents who have low socio-economic status and are included in the vulnerable groups. Services that offer parenting training, parenting education programs, parenting consultations so as to develop parenting skills should be available in daycares or even in other early care settings.

In this way, identifying risks as early as possible in children development becomes essential and preventive programs can progress children life trajectories.

Conclusion

In the last decades, scientific findings taken from neuroscience and empirical findings taken from some successful programs during the early years of life give us a clear message which is the need to develop early childhood policy. Prevention and having a high quality of life in young children is a crucial investment for the wellbeing of the future society. The process of neural circuits maturation beings before birth, reaches its peak at the first three years of life. During these years, but even in the later years of childhood young children begin to regulate their emotion, develop important cognitive skills and learn how to react physiologically to stressful events. The way these critical processes mature depend significantly how the early environment of the child is built. As a conclusion, the main focus of early childhood policy should be how to create service systems which can provide high quality care for each child since the first years of life.

Reference

- Administration for Children and Families. (2002). *Making a difference in the lives of infants and toddlers and their families: The impacts of Early Head Start*. Washington, DC: U.S. Department of Health and Human Services.
- AOs S. Lieb R. Mayfield J. Miller M. & Pennucci A. . (2004). *Benefits and costs of prevention and early intervention programs for youth*. Olympia WA: Washington State Institute for Public Policy.

- Caldji C. Tannenbaum B. Sharma S. Francis D. Plotsky P. & Meaney M. (1998). Maternal care during infancy regulates the development of neural systems mediating the expression of fearfulness in the rat. *Proceedings of the National Academy of Sciences*, (pp. 5335-5340).
- California Department of Education/Child Development Division. (2012). *California Infant/Toddler Curriculum Framework*. Sacramento: California Department of Education.
- Center on the Developing Child at Harvard University. (2007). *A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children*.
- Copple, C & Bredekamp, S. (2009). *Developmentally appropriate practice in early childhood programs serving children from birth through age eight (3rd ed.)*. Washington, DC: NAEYC.
- Dawson G. & Fischer K. (1994). *Human behavior and the developing brain*. New York: Guilford.
- Hensch, T. (2005). Critical period plasticity in local cortical circuits. *Nature Reviews, Neuroscience*, 877-888.
- Knudsen, E. (2004). Sensitive periods in the development of the brain and behavior. *Journal of Cognitive Neuroscience*, 1412-1425.
- Levitt, P. (2003). Structural and functional maturation of the developing primate brain. *Journal of Pediatrics*, 35-45.
- McCartney K. & Phillips D. (2006). *The handbook of early childhood development*. Oxford Uk: Blackwell.
- Meaney, M. (2010). Epigenetics and the biological definition of gene x environment interactions. *Child Development*, 41-79.
- Miller, C. A., Campbell, S. L., & Sweatt, J. D. . (2008). DNA methylation and histone acetylation work in concert to regulate memory formation and synaptic plasticity. *Neurobiology of Learning and Memory*, 599-603.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of family context in the development of emotional regulation. *Social Development*, 361-388.
- National Scientific Council on the Developing Child. (2007). *The science of early childhood development: Closing the gap between what we know and what we do*.
- Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C. R., & Nores, M. . (2005). *Lifetime effects: The High/Scope Perry Preschool study through age 40*. Ypsilanti, MI: High/Scope Press.
- Schweinhart, L. J., Montie, J., Xiang, Z., Barnett, W. S., Belfield, C. R., & Nores, M. (2005). *Lifetime effects: The High/Scope Perry Preschool Study through Age 40*. Ypsilanti, MI: High/Scope Press.
- Shonkoff, J. & Meisels, S. (2000). *Handbook of early childhood intervention*. New York: Cambridge University Press.
- Shonkoff, J. P., Boyce, W. T., & McEwen, B. S. (2009). Neuroscience, molecular biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention. *The Journal of the American Medical Association*, 2252-2259.
- St. Pierre, R.G., & Layzer, J.I. (1999). Using home visits for multiple purposes: The Comprehensive Child Development Program. *The Future of Children*, 134-151.
- Swim, T. (2007). *Infants & Toddlers*. New York: Thomson Delmar Learning.
- Webster-Stratton, C., Reid, J., & Hammond, M. (2001). Preventing conduct problems in Head Start children: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology*, 283-302.